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EXAMINER

CHANG, SHIRLEY

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/829,468	Applicant(s) SEXTRO ET AL.	
	Examiner Shirley Chang	Art Unit 2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 January 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to claims 1, 11, 18 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claim(s) 11 is/are rejected under 35 U.S.C. 102(e) as being anticipated by Ellis (20040117831).

As to claim 11 Ellis et al. discloses:

providing a broadcast signal comprising a video stream ("FIG. 1 shows a video broadcasting system in accordance with one embodiment of the invention, generally designated by reference numeral 10. Broadcasting system 10 includes a broadcast source 12 and a plurality of receivers 14. The broadcast source in this embodiment of the invention is a digital satellite system that broadcasts video content on multiple RF frequencies or channels" [0013]);

embedding commands in the video stream, said embedded commands operable to access interactive features, said embedded commands synchronized and correlated with additional Internet-based content ("Broadcast source 12 includes means for transmitting or otherwise conveying a primary video stream and ancillary digital data content to receivers 14. In the case of digital satellite transmission, ancillary data can be easily transmitted in digital form along with video and audio streams. Protocols such as MPEG-2 already provide for incorporating ancillary digital data in packets that are downloaded with digital audio/video content using satellite transmission facilities.

Another example is in the analog realm, in which Philips sells a device called the Ghost Echo Cancellation Reference Signal. By injecting a known digital stream on a single analog television VBI line, advanced televisions or PCs can more easily detect when a multipath (ghost) signal is received and take measures to clean up the image" [0015]; "A step 222 comprises formatting supplemental data files in a graphical markup language, preferably HTML. Each supplemental HTML data file has instructions for rendering a hyperlink page or overlay on the video stream at an indicated time. Each overlay can have transparent areas or regions, which are set to a key color or chroma color. Overlays can also contain hyperlinks to other overlays and to other non-overlay documents and objects" [0051]);

said embedding comprising embedding commands in said video stream to prompt access to Internet sites offering pushed products selected using analysis of said viewer's habits ("The user may also view a listing of pay-per-view sports by selecting option 357, or a listings of sports programs on now by selection option 358. The user

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may purchase sports-related merchandise through an interactive shopping application by selecting option 359. Sports hub screen 350 may also display options for accessing sports web sites, sports discussion groups, sports chat groups, and other program guide features (e.g., any features shown and used with other hubs) with sports-related content" [0166]; "Screen 400 may also provide other options such as the option to buy tickets for local sports events by selecting option 403. When the user selects option 403, the program guide may provide a schedule of sporting events. The user may select a sporting event to purchase a ticket for that event. Sporting schedules may be obtained from a real-time data source, server, or other database" [0185]; [0167]; "Selecting Specials option 132G from Movies screen 130 (FIG. 5) may display a screen such as screen 220 shown in FIG. 14. This screen presents list 221 of special offers related to movies that may be available from the system provider. These offers may include a special deal on a VOD movie, buy one get one free offers, movie clubs allowing the user to get discounts on purchases of multiple movies, upgrades of single or multiple movie channels, etc. Selecting a specific offer may display a screen similar to the Program Information screen with details on the offer, such as price and description, and the option to purchase the offer. When the user purchases one of the special offers, this information along with the user's account information may be transmitted to the television distribution for processing so that the user can access the purchased channels, programs, etc., and the user's account may be debited. Further features of an illustrative interactive television program guide system with pay program package promotion are described in Knudson et al. U.S. patent application Ser. No. 08/944,153,

filed Oct. 6, 1997, which is hereby incorporated by reference herein in its entirety. While viewing the Program Information screen for any program that is part of a special offer, the guide may present the option to view and/or purchase any of those offers" [140]; "guide may provide web sites or merchandise in a shopping application that match the user's preferences" [0203]);

displaying said additional Internet-based content superimposed on said video stream from said traditional broadcast signal ("FIG. 3 shows how this is accomplished. An overlay window 200 is opened for displaying a hyperlink overlay. Video subsystem 66 is configured to display the video stream in a viewport 201 that coincides in size and position with the overlay window 200. Thus, non-transparent areas of the hyperlink overlay appear "through" the video stream, and appear to overlay the video stream" [0044]; "A step 222 comprises formatting supplemental data files in a graphical markup language, preferably HTML. Each supplemental HTML data file has instructions for rendering a hyperlink page or overlay on the video stream at an indicated time. Overlays can also contain hyperlinks to other overlays and to other non-overlay documents and objects" [0051]).

Claim Rejections - 35 U.S.C. § 103

The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the

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subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim(s) 1, 2, 4, 12, 14, 18-19 is/are rejected under 35 U.S.C. § 103(a) as being unpatentable over Butler et al. (6324694) in view of Smallcomb (5938737).

As to claim 1, Butler et al. discloses:

receiving a terrestrial broadcast signal comprising a video stream (terrestrial broadcast source [0013]);

interpreting commands embedded in the video stream, said embedded commands operable to access interactive features ("Broadcast source 12 includes means for transmitting or otherwise conveying a primary video stream and ancillary digital data content to receivers 14. In the case of digital satellite transmission, ancillary data can be easily transmitted in digital form along with video and audio streams. Protocols such as MPEG-2 already provide for incorporating ancillary digital data in packets that are downloaded with digital audio/video content using satellite transmission facilities.

Another example is in the analog realm, in which Philips sells a device called the Ghost Echo Cancellation Reference Signal. By injecting a known digital stream on a single analog television VBI line, advanced televisions or PCs can more easily detect when a multipath (ghost) signal is received and take measures to clean up the image" [0015]; "A step 222 comprises formatting supplemental data files in a graphical markup language,

preferably HTML. Each supplemental HTML data file has instructions for rendering a hyperlink page or overlay on the video stream at an indicated time. Each overlay can have transparent areas or regions, which are set to a key color or chroma color. Overlays can also contain hyperlinks to other overlays and to other non-overlay documents and objects" [0051]);

displaying said additional Internet-based content superimposed on said video stream from said terrestrial broadcast signal ("FIG. 3 shows how this is accomplished. An overlay window 200 is opened for displaying a hyperlink overlay. Video subsystem 66 is configured to display the video stream in a viewport 201 that coincides in size and position with the overlay window 200. Thus, non-transparent areas of the hyperlink overlay appear "through" the video stream, and appear to overlay the video stream" [0044]; "A step 222 comprises formatting supplemental data files in a graphical markup language, preferably HTML. Each supplemental HTML data file has instructions for rendering a hyperlink page or overlay on the video stream at an indicated time. Overlays can also contain hyperlinks to other overlays and to other non-overlay documents and objects" [0051]).

Butler fails to specifically teach, said embedded commands synchronized and correlated with additional Internet-based content; receiving said Internet-based content via satellite transmission, and sending transmitting information via landline transmission

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In an analogous art, Smallcomb discloses said embedded commands synchronized and correlated with additional Internet-based content; receiving said Internet-based content via satellite transmission, and sending transmitting information via landline transmission (satellite downstream telephone line upstream for internet data; col. 3, lines 41-67).

It would have been obvious to one of ordinary skill in the art to modify Butler's system to teach said embedded commands synchronized and correlated with additional Internet-based content; receiving said Internet-based content via satellite transmission, and sending transmitting information via landline transmission, as taught by Smallcomb, so as to reduce user upstream costs, while enjoying the benefits of broadband connections.

As to claim 2 Butler et al. discloses:

said embedding comprising embedding HTML commands (met as discussed in claim 1).

As to claim 4 Butler et al. discloses:

said embedding comprising embedding delimiters to define sequential video clips for storage and future display stream ("FIG. 2 shows an example implementation of PC 14

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in more detail. PC 14 is enhanced for purposes of displaying broadcast television and accompanying digital data content. It includes a motherboard (not shown) having a processor 52 (e.g., x86 or Pentium.RTM. microprocessor from Intel Corporation) and volatile memory 54. Volatile memory 54, in combination with non-volatile memory 55, forms program storage memory 56. Non-volatile memory 55 comprises a floppy disk, a hard disk, a CD-ROM, or some other type of computer-readable storage media.

Application programs, containing instructions for performing the steps described herein, are contained in the storage media" [0031]; "A step 234 comprises displaying the hyperlink overlays, defined by the supplemental data files, on the display device in conjunction with the video stream. If the overlays have been previously cached, this step includes retrieving them from cache storage. Control data, received along with the supplemental data files, is used in this step to associate hyperlink pages or overlays with the video stream" [0055]; "While the invention has been described primarily for use with broadcast video streams, note that video streams might also be available through other means such as local storage (hard disk, DVD, CD, VCR, etc.). The invention is also useful in conjunction with video sources such as these. For instance, a movie might be provided on a DVD along with a group of transparent HTML overlay files for use along with the movie. Alternatively, the movie might be provided on a DVD, with the overlay files being downloaded from an Internet source" [0060]).

As to claim 14 Butler et al. discloses:

said embedding comprising embedding commands utilizing streaming data from said Internet or television broadcast to further enhance the viewing experience by continuously superimposing interactive data in various locations on said broadcast video ("Broadcast source 12 includes means for transmitting or otherwise conveying a primary video stream and ancillary digital data content to receivers 14. In the case of digital satellite transmission, ancillary data can be easily transmitted in digital form along with video and audio streams. Protocols such as MPEG-2 already provide for incorporating ancillary digital data in packets that are downloaded with digital audio/video content using satellite transmission facilities" [0015]; "FIG. 3 shows how this is accomplished. An overlay window 200 is opened for displaying a hyperlink overlay. Video subsystem 66 is configured to display the video stream in a viewport 201 that coincides in size and position with the overlay window 200. The video subsystem is also configured to display the video stream only over those areas of the hyperlink overlay that are not set to the predetermined color key. Thus, non-transparent areas of the hyperlink overlay appear "through" the video stream, and appear to overlay the video stream." [0044]; "Alternatively, timing and other information can be provided to the PC along with communication packets in which the overlays are transmitted. The timing information indicates times, relative to the video stream, at which particular overlays should be displayed. Hyperlinks can be activated to override the specified timing. An alternative method to synchronize the video that doesn't rely upon specific timing relative to the video stream is by using closed-caption text. By examining a closed-

caption stream, specific events can be triggered to occur based upon when the actors on the screen enunciate certain words that serve as reference marks" [0048]).

As to claim 18, Butler et al. discloses:

a broadcast video receiver for receiving video data from a video provider service via terrestrial broadcast transmission (terrestrial broadcast source [0013]);

an internet browser providing bidirectional access to internet content ([0041])

a graphics processor capable of receiving said broadcast video content and said internet content and providing combined video data comprised of both broadcast video content and internet content (met as discussed above and by processor 52, figure 2; "FIG. 2 shows an example implementation of PC 14 in more detail. PC 14 is enhanced for purposes of displaying broadcast television and accompanying digital data content" [0031]).

a display in communication with said graphics processor for displaying said combined video data (monitor 68, figure 2; "The PC 14 has a video subsystem 66 connected to the PCI bus 62. Video and audio data is transferred from tuner 60 over PCI bus 62 to the video subsystem 66. In some embodiments, tuner hardware instead decodes an MPEG stream itself without ever passing the data over the PCI bus. In such systems, the uncompressed raw YUV video is sent along a simple wire connection to the video subsystem 66 board. In the illustrated embodiment, however, the video subsystem 66

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includes circuitry for decoding MPEG-encoded or other video data formats. Video subsystem 66 also includes video display drivers for driving a computer monitor 68" [0034]).

a viewer interface interpreting viewer input and sending corresponding data content through said internet browser to a third party ("The PC 14 has a video subsystem 66 connected to the PCI bus 62. Video and audio data is transferred from tuner 60 over PCI bus 62 to the video subsystem 66. In some embodiments, tuner hardware instead decodes an MPEG stream itself without ever passing the data over the PCI bus. In such systems, the uncompressed raw YUV video is sent along a simple wire connection to the video subsystem 66 board. In the illustrated embodiment, however, the video subsystem 66 includes circuitry for decoding MPEG-encoded or other video data formats. Video subsystem 66 also includes video display drivers for driving a computer monitor 68" [0029]; "An input/output (I/O) adapter 140 is coupled to the ISA bus 130 to interface with numerous I/O devices, including a digital tape driver 142, a floppy disk drive 144, and a hard disk driver 146. A remote receiver 148 is also coupled to the I/O adapter 140 for receiving signals from the remote cordless keyboard 66 and remote control handset 68 in an IR or RF format. Alternatively, the keyboard and handset can be directly wired to the computer. The I/O adapter 140 further provides conventional serial ports, including a COM1 port 150, a COM2 port 152, and an LPT1 port 154. An IR transmitter (not shown) can be coupled to the COM1 port 150 to generate infrared signals to control electronic devices, such as stereo equipment, VCR, and the like. The computer 60 can also be hooked directly to these components" [0042]; "It will be

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apparent to those familiar with Internet technology that the hyperlink overlays described above are similar to documents (often referred to as "Web pages") that can be viewed when browsing the Internet's World Wide Web. This is an attractive feature of the invention, because it allows broadcasters to use existing Internet content development tools for designing ancillary digital data content" [0022]).

Butler fails to specifically teach, said internet browser receiving said internet content via satellite transmission, and said internet browser sending said internet content via landline transmission.

In an analogous art, Smallcomb discloses said internet browser receiving said internet content via satellite transmission, and said internet browser sending said internet content via landline transmission (satellite downstream telephone line upstream for internet data; col. 3, lines 41-67).

It would have been obvious to one of ordinary skill in the art to modify Butler's system to teach said internet browser receiving said internet content via satellite transmission, and said internet browser sending said internet content via landline transmission, as taught by Smallcomb, so as to reduce user upstream costs, while enjoying the benefits of broadband connections.

3. Claim(s) 1, 3, 5-10, 12-13 and 15-19 is/are rejected under 35 U.S.C. § 103(a) as being unpatentable over Ellis et al. (2004/0117831) in view of Smallcomb (5938737).

As to claim 1,

As to claim 1, Ellis et al. discloses:

receiving a terrestrial broadcast signal comprising a video stream ('dedicated digital or analog channels, or at least an allocated portion of the available bandwidth in communications paths 24, may be used for the transmission of certain types of data (e.g., video-on-demand programs, chat messages, etc.). Such dedicated channels may be separate from the channels used for transmitting television program broadcast signals to the user television equipment. If desired, television programming may be transmitted to user television, survey information, etc.) may be transmitted to and from the user over a second communications path such as a telephone, cable, or wireless link' [0096]);

interpreting commands embedded in the video stream, said embedded commands operable to access interactive features ("Communications paths 21A, 21B, 21C, and 23 may be any suitable communications paths such as satellite links, coaxial cable, fiber optics, free-space transmissions, telephone links, or a combination of such links or other suitable links. Television distribution facility 16 may also provide data to user television

equipment 20 from communications network 31 (e.g., the Internet) as shown in FIG. 1A” [0091]; “Each user has a receiver, which is typically a set-top box such as set-top box 26, but which may also be other suitable television equipment into which circuitry similar to set-top box circuitry has been integrated. For example, user television equipment 20 may be based on an advanced television receiver such as a high-definition television (HDTV) receiver or other such television-based platform. A set-top box may include a Data Over Cable Service Interface Specification (DOCSIS) modem for use in two-way communication to and from a server or television distribution facility. Set-top box 26 may also comprise a WebTV Internet Receiver; “News stories may be obtained from real-time news data source 19 (FIG. 1A), from program guide database 14, from a television distribution facility, or from a web server connected to user television equipment via communications network 38 (e.g., the Internet) and paths shown in FIG. 1B. If an individual program has sports scores or news stories associated with it, the scores or news may be available directly from a listing or information screen by, for example, providing on-screen options for scores or news stories related to the program. These options act as hyperlinks which allow users to access related information” [0183]).

displaying said additional Internet-based content superimposed on said video stream from said terrestrial broadcast signal (television 30, figure 1A; “The user may also be able to bring up a sports ticker without going into the hub (e.g., by pressing a key on the remote control while watching television). FIG. 35 displays live data of sports scores on controllable sports ticker 424 in overlay 422 on top of a television program displayed on screen 420 (e.g., program shown on channel 4). Controllable ticker 424 may contain a

selectable sports category 421 such as national football league (NFL), major league baseball, national hockey league, etc.” [0186]; “The user may view a controllable sports ticker, as shown for example in FIG. 35, by selecting option 354. The user may participate in sports wagering and voting as well, as shown for example in FIGS. 36-38, by selecting option 355. The user may participate in fantasy sports leagues, as shown for example in FIGS. 39-40, by selecting option 356. The user may also view a listing of pay-per-view sports by selecting option 357, or a listings of sports programs on now by selection option 358. The user may purchase sports-related merchandise through an interactive shopping application by selecting option 359. Sports hub screen 350 may also display options for accessing sports web sites, sports discussion groups, sports chat groups, and other program guide features (e.g., any features shown and used with other hubs) with sports-related content” [0166]).

Ellis fails to specifically teach, said embedded commands synchronized and correlated with additional Internet-based content; receiving said Internet-based content via satellite transmission, and sending transmitting information via landline transmission.

In an analogous art, Smallcomb discloses said embedded commands synchronized and correlated with additional Internet-based content; receiving said Internet-based content via satellite transmission, and sending transmitting information via landline transmission (satellite downstream telephone line upstream for internet data; col. 3, lines 41-67).

It would have been obvious to one of ordinary skill in the art to modify Ellis' system to teach said embedded commands synchronized and correlated with additional Internet-based content; receiving said Internet-based content via satellite transmission, and sending transmitting information via landline transmission, as taught by Smallcomb, so as to reduce user upstream costs, while enjoying the benefits of broadband connections.

As to claim 3, Ellis et al. discloses:

providing a digital interactive set-top box coupled to a standard television, said interactive set-top box accessing said additional Internet-based content and superimposing said content on said video stream (met as claimed above in claim 1 with respect to Ellis et al.; "Each user has a receiver, which is typically a set-top box such as set-top box 26, but which may also be other suitable television equipment into which circuitry similar to set-top box circuitry has been integrated. For example, user television equipment 20 may be based on an advanced television receiver such as a high-definition television (HDTV) receiver or other such television-based platform. A set-top box may include a Data Over Cable Service Interface Specification (DOCSIS) modem for use in two-way communication to and from a server or television distribution facility. Set-top box 26 may also comprise a WebTV Internet Receiver. For clarity, the present invention will be described primarily in the context of user television equipment 20 that

is based on set-top boxes 26. As shown in FIG. 1A, each set-top box 26 may have memory 25. Memory 25 may be used, for example, for maintaining a database of program listings data" [0098]).

As to claim 5, Ellis et al. discloses:

said embedding comprising embedding delimiters to define sequential video clips for storage and future display, each of said sequential video clips comprising a segment of a sporting event ("For example, scores for a past game may be displayed on screen 350. The user may then select the score option on screen 350 to display an information screen for the game. The information screen may have highlights of the game, an option to display video highlights, statistics, related stories, etc." [0184]; "If the viewer selects Video Clips option 132F from Movies screen 130, the program guide may display a screen such as screen 210 shown in FIG. 13. Screen 210 allows the user to find specific video clips and to display them. The screen may allow the user to see a list of new video clips, to see a list of clips related to video on demand movies, to see a list of clips related to shopping, to see other predefined lists of video clips, or to search for a clip or clips by selecting an option from list 211. The program guide may provide the user with an opportunity to search for a video clip or clips, for example, by providing a television screen similar to screen 200 shown in FIG. 12. When the user selects a specific clip from list 211, it may be shown in the video window of a Program Information screen, or it may be shown as a full-screen video. The video clips may be maintained on a database 14 or on a server at the television distribution facility or elsewhere and transmitted to the user television equipment along communications paths shown, for

example, in FIGS. 1A-1C" [0138]; While viewing the Program Information screen for any program with related video clips, the guide may also present the option to view any of those clips: [0139]; "FIG. 31 is an illustrative interactive television display screen for highlighted sports television program listings in accordance with the present invention." [0044]; "The program guide with niche hubs of the present invention may provide the user with an opportunity to view highlighted television program listings within the hub. Only programs relating to the user interest category of the niche hub are highlighted in the program listings. For example, the program guide may display listings screen 380 as shown in FIG. 31 when the user selects option 352 in menu screen 350 of the sports fan niche hub. Screen 380 displays listings grid 386 which is organized by time and television channel. Grid 386 displays all programs on the channels in the grid, but highlights sports programs since the user entered screen 380 from the sports hub. If a channel has no programs related to the category of the hub (e.g., sports), the program guide may omit that channel from the television programs listings entirely. Alternatively, the program guide may display a screen similar to Movies On Now shown in FIG. 6 (but directed toward sports programming on now) when the user selects option 352." [0175]; "If the user has selected a sport from list 361 in screen 360 (such as football), only programs relating to that sport are highlighted in grid 386. The program guide listings may be obtained from database 14. The program guide application on the set-top box or computing equipment at the television distribution facility or other location may highlight the sports programs as shown in FIG. 31." [0176])

As to claim 6, Ellis et al. discloses:

storing one or more of said video clips of said selected plays; summarizing said stored video clips with a graphic summary including coded indicators denoting types of plays; replaying one of said video clips upon viewer selection of a corresponding said coded indicator (met as discussed in claim 5 and "Video window 105, typically showing the currently tuned channel, but which may show other videos, such as video clips on demand" [0018]; "Each individual area within the hub that is tailored to a sub-category such as a specific sport, team, league, etc. contains niche hub features that relate to that sub-category. For example, if the user enters the football area of the niche hub, the program guide displays options such as television program listings, news groups, news stories, sports scores, fantasy sports leagues, etc. that relate (or only relate) to football in screen 350 and in other display screens of the sports fan hub. These options can be the same as screen 350 with filtered content related to the selected sub-category, a subset of the options displayed on screen 350, or options that are specific to the selected sub-category" [0169]; "The information screen may have highlights of the game, an option to display video highlights, statistics, related stories, etc." [0184]).

As to claim 7 Ellis et al. discloses:

comprising selecting a fixed graphic format for viewing on a standard non-interactive television (program guide as shown in figure 31).

As to claim 8 Ellis et al. discloses:

said embedding comprising embedding commands in said video stream to facilitate polling of viewers, allowing said viewers to vote on an aspect of said simultaneously displayed broadcast data ("The user may view a controllable sports ticker, as shown for example in FIG. 35, by selecting option 354. The user may participate in sports wagering and voting as well, as shown for example in FIGS. 36-38, by selecting option 355. The user may participate in fantasy sports leagues, as shown for example in FIGS. 39-40, by selecting option 356" [0166]).

As to claim 9, see claim 10.

As to claims 10 Ellis et al. discloses:

said embedding comprising embedding commands in said video stream to prompt access to Internet sites offering pushed products selected from the group consisting of: tickets to future sporting events, travel packages, and sports apparel ("The user may also view a listing of pay-per-view sports by selecting option 357, or a listings of sports programs on now by selection option 358. The user may purchase sports-related merchandise through an interactive shopping application by selecting option 359. Sports hub screen 350 may also display options for accessing sports web sites, sports discussion groups, sports chat groups, and other program guide features (e.g., any features shown and used with other hubs) with sports-related content" [0166]; "Screen 400 may also provide other options such as the option to buy tickets for local sports events by selecting option 403. When the user selects option 403, the program guide

may provide a schedule of sporting events. The user may select a sporting event to purchase a ticket for that event. Sporting schedules may be obtained from a real-time data source, server, or other database" [0185]).

As to claim 12 Ellis et al. discloses:

said embedding comprising embedding commands enabling a viewer to interactively complete a transaction to purchase various products by selecting an Internet generated icon on the display screen ("a user could click on Tim Allen's Binford saw during an episode of "Tool Time" to find out more information about it such as where to purchase it" [0046]; "guide may provide web sites or merchandise in a shopping application that match the user's preferences" [0203]).

As to claim 13 Ellis et al. discloses:

said embedding comprising embedding commands enabling a viewer to interactively complete a transaction to purchase various products and receive confirmation of said transaction in real-time on a display screen (met as discussed in claim 12 and also "Screen 400 may also provide other options such as the option to buy tickets for local sports events by selecting option 403. When the user selects option 403, the program guide may provide a schedule of sporting events. The user may select a sporting event

to purchase a ticket for that event. Sporting schedules may be obtained from a real-time data source, server, or other database" [0185]).

As to claim 15 Ellis et al. discloses:

said embedding comprising embedding commands utilizing streaming data comprising a selected personalized portfolio of stocks, the ticker for said selected portfolio being taken from market data embedded in said video stream and presented and updated in a banner or window on said display screen ("Real-time data sources 11 such as real-time sports data source 15, real-time stock market data source 17, real-time news data source 19, and real-time music source 27 are used to gather information such as sports scores, stock quotes, news, music and the like from, e.g., various sporting and news sources or radio stations. Real-time information from real-time data sources 30 may be provided to each of the television distribution facilities 16 by providing this information to main facility 12 via communications path 23 and redistributing the information to television distribution facilities 16 via paths 18. Television distribution facility 16 may also provide data to user television equipment 20 from communications network 31 (e.g., the Internet) as shown in FIG. 1A" [0091]; "Another illustrative television program guide main menu screen of a niche hub in accordance with the present invention is shown in FIG. 58. Menu screen 690 in FIG. 58 is the main menu screen of a news and information hub. Screen 690 provides the user with the option of using a variety of program guide features related to news and information. The user may view a stock

report by selecting option 691A as discussed with respect to FIG. 59. The user may view a stock ticker by selecting option 691B as discussed with respect to FIG. 60" [0235]; "" [Referring to FIG. 59, screen 700 is an example of a stock report display screen that the program guide can provide when the user selects option 691A in screen 690. Screen 700 provides the user with a personalized stock report in list 701. List 701 provides the latest stock quote for a list of publicly traded companies, indexes, and funds as well as the change in the current price relative to the previous day's closing price. The user may add stocks to the list 701 by selecting option 702 in screen 700. The program guide may then provide the user with a list of stocks to choose from that may be added to list 701. The user may scroll down the list by entering letters from a keypad. If desired, the program guide may provide the user with the opportunity to enter stock symbols to add stocks to screen 700" [0236]; "The program guide may also provide a scrolling stock ticker as shown, for example, in FIG. 60 when the user selects option 691B in screen 690. The program guide may then display the video and audio for the current television channel concurrently with a stock ticker in overlay 711. Overlay 711 contains stock ticker 712 which continuously scrolls recent stock quotes for a variety of publicly traded companies, indexes, and funds. If desired, ticker 712 may scroll only a subset of stocks that are selected by the user (e.g., that are picked on screen 700). The program guide may obtain real-time stock information for scrolling ticker 712 and list 701 in screen 700 from real-time stock market data source 17 along a digital or analog channel in communications paths as shown, for example, in FIG. 1A." [0237]; "The program guide may also obtain news stories, weather reports, and stock

quotes from a web server (e.g., server 36) connected to user television equipment via communications network 38 (FIG. 1B)" [0242]; "The user may also be able to bring up a sports ticker without going into the hub (e.g., by pressing a key on the remote control while watching television). FIG. 35 displays live data of sports scores on controllable sports ticker 424 in overlay 422 on top of a television program displayed on screen 420 (e.g., program shown on channel 4)." [102]).

As to claim 16 Ellis et al. discloses:

comprising editing interactive data selected from a group consisting of sports teams and portfolio stocks from a screen menu in real-time (met as discussed in claim 15 and "FIG. 44 is an illustrative interactive television display screen for a editing a personal profile in accordance with the present invention" [0057]; "The user may edit a user profile by selecting a profile in list 541 and then pressing an "OK" key on the remote control. The program guide may then display a screen such as television display screen 550 as shown in FIG. 44. The personal profile screen may also provide the user with the opportunity to enter other user preference information such as favorite channels, actors, directors, genres of programming, etc. The program guide may use the user preference information to set targeted advertising, automatic reminders, automatic recording of favorite programs, etc." [0202]; "Interactive program guides operating on user television equipment 76 may also provide users with the opportunity to compose a message and send it to message processing facility 71. For example, program guides may provide

users with the opportunity to compose a message to a television channel or a television personality and send the message to a television program entity that processes messages for that television channel or television personality. Program guides may also provide users with an opportunity to vote for athletes who are candidates for an all-star team, enter a television program contest, answer trivia questions, participate in sports or horse wagering or other interactive wagering, etc. The program guide may send the user's input (e.g., the user's vote, the user's response to a contest question or trivia question, the user's bet, etc.) to message processing facility 71 which processes user responses (e.g., counts users' votes, evaluates user's answers to contest and trivia questions, places the user's bet, etc.) User television equipment 78 may also send messages to television distribution facility 74 and other user television equipment 78 via two-way communications paths 77. Messages from user television equipment 76 and 78 may be forwarded by television distribution facilities 72 and 74 to message processing facility 71 via communications paths 73 which may be satellite links, cable links, telephone network links, microwave links, etc. Communications paths 73 may be two-way communications paths" [0111]).

As to claim 17 Ellis et al. discloses:

comprising providing taskbars displaying various accounts in the home (met as discussed in claim 11 and "The user may edit a user profile by selecting a profile in list 541 and then pressing an "OK" key on the remote control. The program guide may then

display a screen such as television display screen 550 as shown in FIG. 44. The user may enter a password in region 551 to enter that user profile. The user may set a rating restriction in region 552 for the selected name by pressing LEFT and RIGHT arrow keys on the remote control to scroll through a list of rating restrictions. The users favorite program or programs are displayed in region 553. The personal profile screen may also provide the user with the opportunity to enter other user preference information such as favorite channels, actors, directors, genres of programming, etc. The program guide may use the user preference information to set targeted advertising, automatic reminders, automatic recording of favorite programs, etc." [0202]).

As to claim 18, Ellis et al. disclose:

a broadcast video receiver for receiving video data from a video provider service via a terrestrial broadcast transmission (terrestrial broadcast source [0013]);

a graphics processor capable of receiving said broadcast video content and said internet content and providing combined video data comprised of both broadcast video content and internet content; a display in communication with said graphics processor for displaying said combined video data; a viewer interface interpreting viewer input and sending corresponding data content through said internet browser to a third party (set-top box 26, television 30, all of figure 1A; "Main facility 12 preferably contains a processor to handle information distribution tasks. Each set-top box 26 preferably

contains a processor to handle tasks associated with implementing an interactive television program guide" [0100]).

Ellis fails to specifically teach, an internet browser providing bidirectional access to internet content, said internet browser receiving said internet content via satellite transmission, and said internet browser sending said internet content via landline transmission.

In an analogous art, Smallcomb discloses an internet browser providing bidirectional access to internet content, said internet browser receiving said internet content via satellite transmission, and said internet browser sending said internet content via landline transmission (satellite downstream telephone line upstream for internet data; col. 3, lines 41-67).

It would have been obvious to one of ordinary skill in the art to modify Butler's system to teach said embedded commands synchronized and correlated with additional Internet-based content; receiving said Internet-based content via satellite transmission, and sending transmitting information via landline transmission, as taught by Smallcomb, so as to reduce user upstream costs, while enjoying the benefits of broadband connections.

As to claim 19, Ellis et al. disclose:

said internet browser, said graphics processor, and said viewer interface comprising an interactive set-top box (met as discussed in claim 18).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shirley Chang whose telephone number is (571) 272-8546. The examiner can normally be reached on 8:30-5:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Grant can be reached on (571) 272-7294. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

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